

REMARKS

In the Office Action dated June 21, 2005, the specification and claims were objected to; claims 18 and 19 were rejected under 35 U.S.C. § 102 over WO 00/33498 (WO '498); claims 9-17, 20, and 21 were rejected under § 103 over WO '498; and claims 1-8, 22, and 23 were rejected under § 103 over WO '498 in view of U.S. Patent No. 6,683,860 (US '860).

Amended claim 18 is not disclosed by WO '498. Note that claim 18 recites that a *core network system* performs the following: send packet-switched data to a wireless access system for communicating to a mobile station; determine if a send buffer in the wireless access system is about to become empty; and if the send buffer is about to become empty, send filler data to the wireless access system to maintain a connection between the wireless access system and the mobile station. Thus, claim 18 recites that the sending of packet-switched data, determining if a send buffer is about to become empty, and the sending of filler data are all performed by the *core network system*.

In contrast, WO '498 discloses that it is the *mobile station* that may transmit a packet dummy control block if the mobile station does not have data to be transmitted. The acts performed by the mobile station in WO '498 are not the same as the acts recited in claim 18. Therefore, claim 18 is not anticipated by WO '498.

The core network system is further defined in claim 24 (a newly added dependent claim), which recites that the core network system is a serving GPRS support node (SGSN). This further distinguishes claim 24 from the teachings of WO '498.

Independent claim 9 was rejected as being obvious over WO '498 alone. The Office Action incorrectly stated that WO '498 discloses a controller to generate filler data for sending to the mobile station if the mobile station is subscribed to the first level of service to enable a wireless connection to the mobile station to be maintained. The Office Action cited page 16, lines 31-36, and page 17, lines 1-9, of WO '498 as teaching this feature of claim 9. As discussed above, the page 16 passage indicates that the mobile station is the one that sends a packet dummy control block – there is no teaching in WO '498 that the network sends such a packet dummy control block or any other type of filler data to the mobile station. The cited page 17 passage of WO '498 also does not disclose a controller to generate filler data for sending to a mobile station. In fact, WO '498 teaches that during passive periods in downlink delay sensitive data transfer,

the network may assign downlink transmission permissions to other mobile stations and thus the network can transmit data to other mobile stations. WO '498, 20:9-12. This suggests a different solution than sending filler data. Therefore, contrary to the erroneous assertion made in the Office Action, WO '498 does not teach or suggest a controller to generate filler data for sending to a mobile station if the mobile station is subscribed to the first level of service to enable a wireless connection to the mobile station to be maintained.

Moreover, there is no teaching or suggestion anywhere in WO '498 of a controller to determine if a mobile station is *subscribed* to a first level of service or a second level of service. The Office Action stated that WO '498 teaches "different levels of service," citing to page 3, lines 29-35, of WO '498. This passage of WO '498 refers to quality of service (QoS) that distinguishes different quality of service levels for messages communicated by a mobile station. However, claim 9 is not referring to service levels of data transmitted by a mobile station – claim 9 recites a controller to determine if a mobile station is *subscribed* to a first level of service or a second level of service. There is no suggestion anywhere in WO '498 of this determination if a mobile station is *subscribed* to one or another level of service. Therefore, the statement in the Office Action that this feature would have been obvious is erroneous, as WO '498 provides no suggestion that its network is able to determine if a mobile station is subscribed to different levels of service. If a reference exists that suggests a modification of WO '498 in the manner proposed by the Office Action, Applicant requests the production of such a reference. Absent the requisite reference to suggest the modification of WO '498 to achieve the claimed invention, it is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 9.

In view of the allowability of base claims, it is respectfully submitted that the dependent claims of claims 9 and 18 are also allowable.

Independent claim 1 was rejected as being obvious over the asserted combination of WO '498 and US '860. It is respectfully submitted that a *prima facie* case of obviousness has not been established for at least the following reason: the hypothetical combination of WO '498 and US '860 does not teach or suggest *all* elements of claim 1. See M.P.E.P. § 2143 (8th ed., Rev. 2), at 2100-129.

As discussed above, WO '498 does not disclose determining if a mobile station is *subscribed* to a first level of service or a second level of service. This fact is conceded by the Office Action. *See* 6/21/2005 Office Action at 4, 6. However, the Office Action relied upon US '860 as teaching the claim elements missing from WO '498. *Id.* at 4.

WO '498 describes a solution for transferring delay sensitive data. If the mobile station desires to transfer delay sensitive data, the mobile station notifies the network of such fact by providing an indication in a priority field of a PACKET CHANNEL REQUEST or a PACKET RESOURCE REQUEST message that is transmitted by the mobile station to the network. WO '498, 13:34-37. What is performed by WO '498 is an identification of the type of data being transmitted by a mobile station. If transmitted data packets are determined to be delay sensitive, then certain mechanisms are implemented to enhance the ability to send such data packets. However, determining that data is delay sensitive does not constitute "determining if a mobile station is subscribed to a first level of service or a second level of service," as recited in claim 1.

As described on page 16 of WO '498 reference, when delay sensitive data is transmitted, RLC/MAC data blocks include information regarding whether the mobile station has more RLC data blocks to be transmitted. If no further data blocks are to be transmitted, the network may give subsequent uplink transmit permissions to other mobile stations. WO '498, 16:15-18. However, "to guarantee that the first mobile station transferring delay sensitive data does not need to wait too long for an uplink transmit permission the network gives at every N block period an uplink transmit period for the first mobile station." *Id.*, 16:28-31. Thus, in the uplink path, the network described in WO '498 guarantees that a first mobile station is able to transfer delay sensitive data on a timely basis by giving the first mobile station uplink transmit permission every N block period.

In the downlink direction, a downlink temporary block flow (TBF) is preserved by the system described in WO '498 when there is no data to be transmitted to the mobile station by one of several mechanisms. One mechanism involves the mobile station telling the network when the downlink TBF can be released. The other mechanism involves the use of a timer function that causes the release of the downlink TBF after a predetermined time has passed from the latest transmission of downlink data. *Id.*, 17:1-12.

However, none of the above mechanisms described by WO '498 constitute the releasing act of claim 1, namely "releasing a logical connection between the mobile station and a wireless access system according to a first procedure *if subscribed to the first level of service* and according to a second, different procedure *if subscribed to the second level of service*."

US '860 also fails to disclose or suggest the above addressed features of claim 1. The Office Action cited column 4, lines 39-46, of US '860, which describes the ability of the system to simultaneously use several different types of services by establishing multiple TBFs. The different types of services mentioned in the cited passage in column 4 of US '860 is explained further in column 1, which indicates that the different types of services include IP telephony services, streaming application services, facsimile services, or e-mail services. US '860, 1:44-51. However, again, the reference to different types of data communications that can be performed by a mobile station does not teach or suggest the following elements of claim 1: determining if a mobile station is *subscribed* to a first level of service or a second level of service; and releasing a logical connection between the mobile and a wireless access system according to a first procedure *if subscribed* to the first level of service and according to a second, different procedure *if subscribed* to the second level of service.

Because neither WO '498 nor US '860 teaches or suggests all elements of the claim, it is respectfully submitted that the hypothetical combination of WO '498 and US '860 also does not teach or suggest all elements of claim 1. Therefore, a *prima facie* case of obviousness has not been established for at least this reason.

Independent claim 22 is similarly allowable over the asserted combination of WO '498 and US '860.


Dependent claims are allowable for at least the same reasons as corresponding independent claims.

Appln. Serial No. 09/976,643
Amendment Dated September 21, 2005
Reply to Office Action Mailed June 21, 2005

Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0092US).

Respectfully submitted,

Date: 9-21-2005



Dan C. Hu
Registration No. 40,025
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, TX 77024
Telephone: (713) 468-8880
Facsimile: (713) 468-8883